Amendments to the Claims:

This listing of claims replaces all prior versions and listings of claims in the application:

Listing of Claims:

1. (Currently Amended) A carrier head for a chemical mechanical polishing apparatus, comprising:

a rigid base;

a substrate mounting surface that is vertically movable relative to the base; and

a retaining ring to maintain a substrate beneath the mounting surface during polishing, the retaining ring including

a substantially annular lower portion having a bottom surface for contacting a polishing pad during polishing, wherein the lower portion is made of a plastic, and

a substantially annular upper portion having a bottom surface joined to the lower portion and a top surface fixed to and abutting the base, wherein the upper ~~lower~~ portion is made of a metal which is more rigid than the plastic;

wherein the retaining ring is removable from the base as a unit without disassembly of the carrier head.

2. (Original) The carrier head of claim 1, wherein the plastic is substantially inert to a chemical mechanical polishing process.

3. (Previously Presented) The carrier head of claim 1, wherein the lower portion has a durometer measurement between about 80 and 95 on the Shore D scale.

4. (Previously Presented) The carrier head of claim 1, wherein the lower portion is between about 100 and 400 mils thick.

5. (Previously Presented) The carrier head of claim 4, wherein the upper portion is thicker than the lower portion.

6. (Original) The carrier head of claim 1, wherein the plastic is selected from the group consisting of polyphenylene sulfide, polyethylene terephthalate, polyetheretherketone, and polybutylene terephthalate.

7. (Original) The carrier head of claim 6, wherein the plastic is polyphenylene sulfide.

8. (Original) The carrier head of claim 1, wherein the metal is selected from the group consisting of steel, aluminum, and molybdenum.

9. (Currently Amended) The carrier head of claim 1, wherein the metal ~~material~~ has an elastic modulus about ten to one-hundred times the elastic modulus of the plastic. ~~material.~~

10. (Original) The carrier head of claim 1, wherein the lower portion is adhesively attached to the upper portion.

11. (Previously Presented) The carrier head of claim 10, wherein the adhesive is an epoxy.

12. (Original) The carrier head of claim 1, wherein the lower portion is press fit to the upper portion.

13. (Currently Amended) A retaining ring for a carrier head having a mounting surface for a substrate, comprising:

a generally annular lower portion having a bottom surface for contacting a polishing pad during polishing and a top surface, the lower portion made of a plastic; and

a generally annular upper portion having a bottom surface secured to the top surface of the lower portion and a top surface configured to be mechanically affixed to and abut a rigid base of a carrier head, wherein the upper portion is made of a metal which is more rigid than the plastic, wherein the lower portion is secured to the upper portion and the top surface is configured such that the retaining ring is removable as a unit from the base.

14. (Previously Presented) The retaining ring of claim 13, wherein the plastic is substantially inert to a chemical mechanical polishing process.

15. (Previously Presented) The retaining ring of claim 13, wherein the lower portion has a durometer measurement between about 80 and 95 on the Shore D scale.

16. (Previously Presented) The retaining ring of claim 13, wherein the lower portion is between about 100 and 400 mils thick.

17. (Previously Presented) The retaining ring of claim 16, wherein the upper portion is thicker than the lower portion.

18. (Previously Presented) The retaining ring of claim 13, wherein the plastic is selected from the group consisting of polyphenylene sulfide, polyethylene terephthalate, polyetheretherketone, and polybutylene terephthalate.

19. (Previously Presented) The retaining ring of claim 18, wherein the plastic is polyphenylene sulfide.

20. (Previously Presented) The retaining ring of claim 13, wherein the metal is selected from the group consisting of steel, aluminum, and molybdenum.

21. (Currently Amended) The retaining ring of claim 13, wherein the metal ~~material~~ has an elastic modulus about ten to one-hundred times the elastic modulus of the plastic. ~~material.~~

22. (Currently Amended) The retaining ring of claim 13, wherein the lower portion is ~~adhesively~~ attached to the upper portion with an adhesive.

23. (Previously Presented) The retaining ring of claim 22, wherein the adhesive is an epoxy.

24. (Previously Presented) The retaining ring of claim 13, wherein the lower portion is press fit to the upper portion.

25. (Currently Amended) A retaining ring for a carrier head having a mounting surface for a substrate, comprising:

a generally annular lower portion having a bottom surface for contacting a polishing pad during polishing, the lower portion made of a first material that is substantially inert to a chemical mechanical polishing process and has a durometer measurement between about 80 and 95 on the Shore D scale and a first thickness between 100 and 400 mils; and

a generally annular upper portion having a bottom surface secured to the lower portion and a top surface configured to be mechanically affixed to and abut a rigid base of a carrier head, wherein the upper portion is made of a second material which is more rigid than the first material and has a second thickness greater than the first thickness and an elastic modulus about ten to one-hundred times the elastic modulus of the first material, wherein the lower portion is secured

to the upper portion and the top surface is configured such that the retaining ring is removable as a unit from the base.

26. (Previously Presented) The retaining ring of claim 25, wherein the first material is a plastic.

27. (Previously Presented) The retaining ring of claim 26, wherein the plastic is selected from the group consisting of polyphenylene sulfide, polyethylene terephthalate, polyetheretherketone, and polybutylene terephthalate.

28. (Previously Presented) The retaining ring of claim 27, wherein the plastic is polyphenylene sulfide.

29. (Previously Presented) The retaining ring of claim 25, wherein the second material is a metal.

30. (Previously Presented) The retaining ring of claim 25, wherein the metal is selected from the group consisting of steel, aluminum, and molybdenum.

31. (New) The retaining ring of claim 13, wherein the lower portion lacks any aperture from the top surface to the bottom surface of the lower portion.

32. (New) The retaining ring of claim 13, wherein the bottom surface of the lower portion is substantially planar.

33. (New) The retaining ring of claim 13, wherein the bottom surface of the lower portion has channels for slurry transport.

34. (New) The retaining ring of claim 13, wherein the retaining ring has an inner side wall and an outer side wall, and the inner side wall and outer side wall are substantially vertical from the top surface of the upper portion to the bottom surface of the lower portion.

35. (New) A retaining ring for a carrier head having a mounting surface for a substrate, comprising:

a generally annular lower portion having a bottom surface for contacting a polishing pad during polishing and a top surface, the lower portion made of a plastic; and

a generally annular upper portion having a bottom surface secured to the top surface of the lower portion and a top surface configured to be mechanically affixed to and abut a rigid base of a carrier head, wherein the upper portion is made of a metal which is more rigid than the plastic, wherein the lower portion lacks any aperture from the top surface to the bottom surface of the lower portion.

36. (New) The retaining ring of claim 35, wherein the plastic is substantially inert to a chemical mechanical polishing process.

37. (New) The retaining ring of claim 35, wherein the lower portion has a durometer measurement between about 80 and 95 on the Shore D scale.

38. (New) The retaining ring of claim 35, wherein the lower portion is between about 100 and 400 mils thick.

39. (New) The retaining ring of claim 38, wherein the upper portion is thicker than the lower portion.

40. (New) The retaining ring of claim 35, wherein the plastic is selected from the group consisting of polyphenylene sulfide, polyethylene terephthalate, polyetheretherketone, and polybutylene terephthalate.

41. (New) The retaining ring of claim 40, wherein the plastic is polyphenylene sulfide.

42. (New) The retaining ring of claim 35, wherein the metal is selected from the group consisting of steel, aluminum, and molybdenum.

43. (New) The retaining ring of claim 35, wherein the metal has an elastic modulus about ten to one-hundred times the elastic modulus of the plastic.

44. (New) The retaining ring of claim 35, wherein the lower portion is attached to the upper portion with an adhesive.

45. (New) The retaining ring of claim 44, wherein the adhesive is an epoxy.

46. (New) The retaining ring of claim 35, wherein the lower portion is press fit to the upper portion.

47. (New) The retaining ring of claim 35, wherein the bottom surface of the lower portion is substantially planar.

48. (New) The retaining ring of claim 35, wherein the bottom surface of the lower portion has channels for slurry transport.

49. (New) The retaining ring of claim 35, wherein the retaining ring has an inner side wall and an outer side wall, and the inner side wall and outer side wall are substantially vertical from the top surface of the upper portion to the bottom surface of the lower portion.